3.9 VISUAL RESOURCES/LIGHT AND GLARE

3.9.1 Introduction

Both shorelines are comprised primarily of industrial uses, and visual receptors are limited. Receptors are limited to users of a nearby trail at the east and north ends of the Shore upland property and to recreational boaters in Suisun Bay that see the Shore terminal from the water. This section addresses the potential for visual impact to recreational users from continued use of the marine terminal and from accidental spill releases.

3.9.2 Existing Conditions

3.9.2.1 Regional Character of Carquinez Strait and Suisun Bay

Carquinez Strait forms a visually distinct, yet relatively narrow channel that connects San Pablo Bay to Suisun Bay. The approximately 6-mile Strait lies between two major bridges, the Carquinez Bridge, from Crockett to Vallejo, and the Benicia-Martinez Bridge from Benicia to Martinez. Both bridges are visually distinct features in a landscape characterized by gently rolling terrain. To the east, Suisun Bay widens until the city of Pittsburg, where again the shoreline narrows before the waters enter from both the Sacramento and San Joaquin Rivers. Through this area the landscape is a combination of gently rolling and flat expanses of land. The Strait and Suisun Bay are characterized by a visual mix of industrial uses, small towns, and open areas of undeveloped land.

The 1,294-acre Carquinez Strait Regional Shoreline includes several parcels of land along the southern shoreline of the Strait. The area is characterized by coastal scrub and grasslands, bay laurels, and oak woodlands. The shoreline's bluffs rise approximately 750 feet to summits and ridges of the rolling terrain.

East of I-680 is located the city of Martinez Regional Shoreline, 350-acre waterfront park developed from a former industrial fill. Features include the Martinez Marina and public pier.

Characteristic views of the Strait and Suisun Bay show tug boats pushing barges, directing ships, or moving from job to job in the area. Oil tankers are a common site in the area, with four active terminals located between Crockett and Avon.

Regional, county, and city policies address aesthetic issues in the area. These policies include the general plans of both Contra Costa County and Solano counties, and of the cities of Martinez and Benicia. Solano County has designated I-680 as a county scenic roadway from the Benicia-Martinez Bridge north to Cordelia, and the city of Benicia has identified I-680 north of the bridge as a scenic route.

The BCDC San Francisco Bay Plan contains policies on visual quality and visual access to the waterfront. BCDC also provides design review of new projects that may affect the appearance of the Bay.

3.9.2.2 Visual Character of Marine Terminal and Adjacent Area

The Shore terminal is located approximately 1.25 miles from Waterfront Road. Fencing along Waterfront Road for the Shore facility and other industrial properties does not afford views of the terminal. Where fencing mesh can be seen through, only buildings, upland tanks, and piping structure within the Shore upland facility are visible. The area from I-680 to the Shore facility and east is characterized by industrial uses on the shore side of Waterfront Road, and generally, open, rolling hills on the inland side. Waterfront Road is designated in the city of Martinez General Plan as a scenic route.

From the water and land to either side of the marine terminal between I-680 to the west of the terminal and Pacheco Creek to the east, the visual setting is characterized by broad, open vistas of the marsh and shoreline. Bulls Head Marsh, over which Shore's wooden trestle passes, includes wetland grasses and low level shrubs, providing a visual "softscape." Focal points that can be defined as the predominant "hardscape" landscape features along the shoreline include the Benicia-Martinez Bridge, the Shore terminal, and the Tesoro Avon marine terminal. Pacheco Creek and Bulls Head Marsh are environmentally sensitive areas. No residential receptors are located in the area within views of the Shore terminal. Only occasional hikers, water users, and travelers across the Benicia-Martinez Bridge, have views of the Shore terminal.

On the northern shore of the bay are industrial uses including the Valero Benicia Refinery; thus, public views from the north of the Shore terminal are also limited.

Other environmentally sensitive areas in the vicinity of the Shore terminal are identified in Section 3.3, Biological Resources, and Section 3.5, Land Use.

Low-level security lighting is located along the trestle, and higher-intensity lighting for night-time operations is located on the wharf.

3.9.2.3 General Visual Characteristics of the Bay Area

San Francisco and San Pablo Bays' shoreline contains a range of visual stimulation consisting mainly of urbanized and industrial areas, with occasional rural and open space areas, coastal wetlands and salt evaporation ponds. The landform throughout most of the area is hilly terrain. Where there is no development, this open area is generally covered with low vegetation.

The greatest area of urbanization is within the central and south-central portion of San Francisco Bay. From San Francisco south to Palo Alto, urban development is

prevalent on the western shoreline. On the eastern shoreline, urban development is continuous from San Leandro to Pinole Point, but from there eastward is fairly undeveloped.

San Francisco and San Pablo Bays contain about 90 percent of California's remaining coastal wetlands. Major preserves and shoreline parks include Suisun Bay Marsh, with numerous duck hunting preserves, San Pablo Bay National Wildlife Refuge off of Tubbs Island, which is accessible by boat, and Point Pinole Regional Shoreline. China Camp State Park, along the southwest shore of San Pablo Bay, preserves a historic Chinese shrimp fishing village. Coyote Hills Regional Park and San Francisco Bay National Wildlife Refuge protect important wetland acreage in the South Bay for wintering waterfowl. Many other small parks, piers, and recreational marinas also provide access to the shoreline.

The southern portion of the Bay Area contains several large areas of salt evaporation ponds. One is located north of the San Francisco Bay National Wildlife Refuge on the eastern shoreline, and another across the Bay on the western shoreline. Several others are also along the far southern end.

Within the Bay Area, there are numerous ports, harbors, marine terminals, and naval terminals. A description and a map of these facilities are presented in Section 4.0. Marine vessel traffic is a common sight throughout the Bay Area.

3.9.2.4 Outer Coast

Outside of the Golden Gate, one of the more pristine areas is the Farallon Islands, located 27 nautical miles west of Point Bonita in Marin County. The Islands rise from the edge of the continental shelf forming jagged, rocky outcroppings, and are the most important seabird nesting site on the coast. The Gulf of Farallones and the Monterey Bay are Marine Sanctuaries located off the coast and contain protected resources.

A large portion of the northern California coast remains representative of the shoreline of years past. Little development has occurred and areas along the northern California coast remain in pristine form. From the Golden Gate north, the shoreline consists of dramatic coastline features including rolling hilly coastal landforms dropping to sandy beaches, jagged rock outcroppings forming hazards to marine vessels in the nearshore, cliffs that drop to the sea, and large, flat beach areas with dunes. Small shoreline communities and picturesque harbor areas also dot the shoreline in some areas. A large number of rivers and creeks cut the coastline, adding visual interest. Established preserve areas are also along the coastline. Vegetation is diverse, ranging from salt marsh vegetation to douglas fir and redwood forests.

The southern California coastline from Santa Barbara south ranges from undeveloped stretches (southern Orange County/northern San Diego County), to intense development (San Diego, Orange and Los Angeles counties), to lesser intense development, but still much urbanization toward Santa Barbara.

Additional details of the resources of the outer coast are presented in the Unocal Marine Terminal EIR (Chambers Group 1994) and the Gaviota Marine Terminal EIR (Aspen Environmental Group 1992).

3.9.3 Impacts Analysis and Mitigation Measures

Impact Significance Criteria

Visual impacts are considered adverse and significant if one or a combination of the following apply:

- Routine operations and maintenance visually contrast with or degrade the character of the viewshed.
- Actions result in changes in expectations of viewers resulting in a negative impression of the viewshed.
- Night lighting would result in glare conditions affecting nearby residences.

Because of the time factor involved in oil dispersion, visual impacts from spills are considered to be significant adverse (Class I) impacts if first response efforts would not contain or cleanup the spill, resulting in residual impacts that would be visual to the general public on shoreline or water areas. If a spill occurs that would be contained and cleaned during the first response, that spill would be considered a significant adverse (Class II) impact.

3.9.3.1 Shore Marine Terminal Routine Operations and Potential for Accident Conditions

Impact VR-1: Visual Effects from Routine Operations Over the 20-Year Lease Period

Over the lease period, only one tanker would be berthed at the Shore wharf at a time, which is the same as existing conditions. Also, as the wharf cannot be seen from Waterfront Road, views are obstructed and the wharf is distant. Visual impacts or night lighting impacts associated with continued operations are less than significant (Class III).

Proposed Project operations involve tanker activity at the existing Shore Terminal and vessel transit through established shipping lanes in Carquinez Strait, San Pablo and San Francisco Bays. The terminal has been in place for a long time, and the Proposed Project site is industrial in character. No visual changes from existing operations would occur over the lease period. The berthing of ships at the wharf cannot be seen from Waterfront Road, as views are obstructed and the wharf is distant. Viewers along the local trail and from boats have more direct views of the vessels. The only change from existing conditions over the 20-year period of the lease, could be an increase in vessels

berthing at the wharf. Berthing activity could increase to 325 vessels per year. Still, due to wharf capacity, only one vessel at a time would continue to be berthed at the wharf. From the water-side, ships berthed at the terminal would appear as a use consistent with the existing operations. Therefore, project operations would not significantly change the visual character or compatibility, and impacts are considered less than significant (Class III). Because no modifications are proposed to the Shore wharf, no visual changes are expected and, consequently, no impacts are expected to occur. Vessels currently transit near the wharf in the shipping lane. Therefore, continued transit operations also would not result in significant adverse impacts (Class III) to the visual environment.

Night lighting for operations includes lights at the T-head portion of the structure to support loading/ unloading activities. These lights point toward the loading/unloading activity, and, as there are no sensitive receptors in the area, there are no impacts from lighting or glare. No significant adverse impacts (Class III) would result from night lighting.

Vessel transiting to the Shore facility in the Bay transit lanes and along the Bay outer coast would continue to blend in with other accepted tankering operations. No new visual elements would be added and public sensitivity toward views would not change. No significant adverse impacts (Class III) would result.

VR-1: No mitigation is required.

Impact VR-2: Visual Effects from Accidental Releases of Oil At or Near the Terminal

The visual impacts of a spill could last for a long period of time, depending on the level of physical impact and cleanup ability, and are considered to be adverse and significant (Class I or II).

This analysis considers the occurrence of accidental spills separate from routine operations. In general, the potential impacts resulting from such an occurrence would tend to degrade the visual quality of the water and shoreline. The degree of impact is influenced by factors not limited to location, spill size, type of material spilled, prevailing wind and current conditions, the vulnerability and sensitivity of the shoreline, and effectiveness of early containment and cleanup efforts.

The greatest risk of a spill is from small accidents at the terminal during normal operations. While there is less risk of spill during tankering, the size of a spill that could result is much greater, as discussed in Section 3.1.3. The following discusses the visual impacts expected to occur in the event of a spill.

Generally, small leaks and spills (50 to 100 bbls) would be easily contained with contingency measures employed at the terminal. However, the Shore wharf is located in an area of rapidly moving current. Thus, if a spill is not detected immediately, or if a moderate- or large-size spill at or near the terminal occurred at a rate unable to be quickly contained due to the rapid current, then the spill could spread over a large area. Oil spill

modeling (Chambers Group 1994, Wickland 1998) shows that spills originating in the vicinity of the marine terminal have the potential to affect a good portion of the area from West Pittsburg (near the mouth of the Delta) to the west shore of San Pablo Bay.

Visually, oiling conditions could range from light oiling, which appears as a surface sheen, to heavy oiling, including floating lumps of tar. Light product spills generally volatilize relatively rapidly, and little remains within 24 to 48 hours after a spill. Heavy crude oil may disappear over a period of several days, with remaining heavy fractions lasting from several weeks to several months floating at or near the surface in the form of mousse, tarballs, or mats. Therefore, the presence of oil on the water would change the color and, in heavier oiling, textural appearance of the water surface. Oil on shoreline surfaces or nearshore marsh areas would cover these surfaces with a brownish-blackish, gooey substance.

Such oiling would result in a negative impression of the viewshed. The public, becoming aware of a spill, may react negatively to its visual effects. Sensitivity heightens and awareness of the negative change in the environment increases. Without rapid containment by immediate booming and cleanup, the visual effects of even a small spill of 50 bbls can leave residual impacts, and they can be significant (Class I).

In the immediate area of the Shore terminal are Bulls Head Marsh and Pacheco Creek. As per the OSPR Area Contingency Plan, protection of this area is a high priority. The Plan proposes a protection strategy that includes booming. This is discussed in more detail in Section 3.3, Biological Resources.

The impact of a spill (whether Bulls Head Marsh, Pacheco Creek, or other sensitive areas) could last for a long period of time, depending on the level of physical impact and cleanup ability. In events where light oiling would disperse rapidly, significant adverse (Class II) impacts are expected. In events where medium to heavy oiling occurs over a widespread area, and where first response cleanup efforts are not effective, leaving residual effects of oiling, significant adverse (Class I) impacts would be expected. The physical effort involved in cleanup itself, including the equipment used, would contribute to a negative impression of the environment and the visual impact. It is impossible to predict with any certainty the potential consequences of spills; therefore, visual impacts can be considered to be adverse and significant (Class I or II), depending on the effectiveness of first response containment and cleanup.

Mitigation Measures for VR-2:

VR-2: Mitigation measures for oil spill impacts include those measures for contingency planning and response as presented in Operational Safety/Risk of Upset and Biological Resources.

Rationale for Mitigation: Those measures presented in other sections provide improved oil spill capabilities, oil spill containment measures and protection of resources. With implementation of those measures the risk to the visual environment can be reduced to less than significant for small spills.

Residual Impacts: Even with implementation of mitigation for oil spill impacts, visual resources may be impacted from large spills and impacts would remain significant (Class I).

3.9.3.2 Oil Spills from Vessels in Transit in Bay or Along Outer Coast

Impact VR-3: Visual Effects of Oil Spills from Vessels in Transit

Spills would change the color and texture of water and shoreline conditions. The level of public sensitivity and expectations of viewers would result in a negative impression of the viewshed and result in significant adverse (Class I or II) impacts, depending on the various characteristics of a spill and its residual effects.

Vessels transiting the shipping lanes also pose a risk of spills from accidents. A moderate to large spill has the potential to spread within a large area, with floating oil and oil contacting sensitive shoreline resources given the right wind and current conditions, and the size and origin of the spill. For example, oil spill modeling from the Unocal EIR (Chambers Group 1994) showed that if a large spill (100,000 bbls) were to occur in the shipping lanes near Alcatraz Island, oil could spread and beach at almost all shoreline points within the Central Bay and San Pablo Bay areas, as well as affect portions of the South Bay and Carquinez Strait (Bay Scenarios No. 9 and No. 10, 100,000-bbl crude oil spills from Unocal document). While spills would be significant, responsibility for spills for those vessels enroute to the Shore wharf would be the responsibility of the ship's operators/owners and not Shore Terminals LLC, as Shore does not own any vessels. Response capability is analyzed in Section 3.1, Operational Safety/Risk of Accidents.

Spills along the outer coast could result in significant adverse (Class I or II) impacts, where spills would be visible in the nearshore zone or at the shoreline. Spills would change the color and texture of water and shoreline conditions. The level of public sensitivity and expectations of views along the outer coast are more varied than within the Bay. Along many portions of the outer coast, public usage is low. In such areas, the public perception and expectations of viewers would not change as much as those areas where the public frequents. In high use areas, such as coastal park and beach areas, ecological preserve areas, communities and harbors, and other areas where a higher number of viewers would be present, visual sensitivity would be high where cleanup efforts and residual effects were occurring.

It is impossible to predict with any certainty the potential consequences of spills; therefore, visual impacts can be considered to be adverse and significant (Class I or II), depending on the effectiveness of first response containment and cleanup. Response capability for spills from any ships in transit would defer to Clean Bay, as described in Section 3.1.2.6.

Mitigation Measures for VR-3:

VR-3: Mitigation measures for accidents in the shipping lanes would not be Shore Terminals responsibility, but would fall to the vessel operator/owner. Shore Terminals shall implement measures OS-8a and OS-8b in Operational Safety/Risk of Upset.

Rationale for Mitigation: Response capability for containment and cleanup is not the responsibility of Shore Terminals for spills in the shipping lanes. However, Shore's participation in VTS upgrade evaluations, and Shore response actions for spills near the terminal help to reduce potential impacts to shoreline and recreational areas. Impacts to these areas near the Shore terminal may be able to be reduced to less than significant.

Residual Impacts: Even with implementation of mitigation for oil spill impacts, land- and water-related recreational impacts would potentially remain significant (Class I).

3.9.4 Alternatives

3.9.4.1 No Project Alternative

Impact VR-4: Effects on Visual Resources with No New Shore Terminals Lease

The removal of the Shore wharf would have a slight beneficial (Class IV) impact in the Carquinez Strait. Risks from spills to visual resources could be transferred to the other marine terminals who would have increased vessels activities. Spills from those facilities could result in significant adverse (Class I or II) visual impacts. Shore has no responsibility for those facilities.

The No Project Alternative involves lease denial and cessation of terminal operations. The Shore terminal would eventually be decommissioned or converted to another use, which would be subject to separate CEQA review. Heavy equipment, including a barge, crane, and land trucking would likely be used short-term in the decommissioning effort. No significant adverse visual impacts would be anticipated with the decommissioning process. With removal of Shore wharf or trestle from the shoreline, though still within an industrial section of shoreline, a slight beneficial (Class IV) change in visual conditions in the immediate area may occur.

Under the No Project Alternative, impacts associated with the risk of a tanker oil spill would be similar to existing conditions (see Section 3.9.3.3). The No Project Alternative assumes the number of tankers servicing the area would remain essentially the same due to regional demands, and assumes that, with the unavailability of Shore terminal, incoming tankers would instead go to other nearby terminals. Therefore, the risks associated with the transport of oil would not be removed, but simply shifted to other nearby facilities. The localized risk of spill (i.e., risks associated with the specific location and access route to the Shore Terminal) impacting shoreline land uses and

precluding recreational uses would shift. Impacts at the Shore Terminal would not occur and a slight beneficial impact (Class IV) could occur. However, an incremental increase in risk associated with increases in vessel activity at other nearby terminals would result. At those facilities there would be the potential for spill impacts similar to the Proposed Project.

The No Project Alternative assumes that other facilities in the area would have the capability to make up for the loss of the Shore terminal. However, if other facilities do not have this capability, they may be required to expand. While this document does not examine the potential impacts of a facility expansion because the possibility of such an action is too speculative at this time, expansion of existing facilities would not likely result in significant adverse visual impacts. Any such expansion activities likely would trigger environmental review at the time of a proposal to expand any of the facilities in the area.

VR-4: No mitigation is required.

3.9.4.2 Increased Use of Existing Pipelines for Continued Operation of Upland Facility Alternative

Impact VR-5: Continued Shore Upland Operations via Existing Pipelines

Termination of Shore's lease and the continued use of existing pipelines would not result in visual impacts since the pipelines already exist. Spills from pipelines under Shore's responsibility could contaminate land areas and result in significant (Class I or II) visual impacts.

This alternative would increase the use of existing pipelines in the area for transport of petroleum products. These pipelines currently transport processed and crude product from marine unloading facilities to various refineries. Instead of utilizing the Shore wharf, it is assumed that the other marine facilities in the area would service that volume of tanker traffic that would have otherwise been served by Shore terminal had its lease been renewed. This represents a shift in service, resulting in an increased use of these pipelines to higher capacities than at current. Conceivably, although Shore terminal would not be operational, the same amount of petroleum product that moves through these pipelines would continue via other marine facilities in the area.

Termination of Shore's lease and the increased use of existing pipelines would not result in any greater visual impacts as compared to existing conditions. Visual impacts associated with this alternative would be less than significant from routine operations. In the event of a pipeline leak or spill, impacts could be significant adverse (Class I or II) visual impacts. Shore would only have responsibility for cleanup for pipelines under its jurisdiction.

As a consequence of this alternative, if any existing marine facilities require expansion as a result of increase in marine tanker traffic, that action would trigger environmental review. This document does not examine the potential impacts of a facility expansion because the possibility of such an action is too speculative. Still significant adverse visual impacts from increased tanker traffic at an existing facility would be unlikely.

The Shore Upland facility may require expansion as a result of increased storage activities associated with this alternative. Expansion on Shore's existing property would be subject to separate CEQA review; however, no visual impacts would be anticipated.

Mitigation Measures for VR-5:

VR-5: Adherence to mitigation measures OS-10b and BIO-9a.

Rationale for Mitigation: By application of OS-10b for proper pipeline design, inspection, maintenance and retrofitting; and BIO-9a for preparation of a containment plan, land use impacts can be minimized. Impacts from small spills that can be contained can be reduced to less than significant.

Residual Impacts: Impacts of land use and recreational resources on land can remain significant (Class I) from a large oil spill.

3.9.4.3 Modification to Existing Pipelines for Continued Operation of Upland Facility Alternative

Impact VR-6: Continued Shore Upland Operations Via Modifications To Existing Pipelines

Termination of Shore's lease and the use of modified pipelines would not result in visual impacts since the pipelines already exist. Spills from modified pipelines under Shore's responsibility could contaminate land areas and result in significant (Class I or II) visual impacts

This alternative entails the reactivation of the unused PG&E fuel oil line. Short-term construction impacts could cause visual disturbance along the construction corridor, but would be temporary and less than significant. Pipeline rupture, corrosion, leaks, and maintenance would have a potential to result in visual impacts. These inherent oil spills risks do not currently exist along the pipeline route. In the event of an oil spill from a pipeline release, visual impacts to the landscape would be potentially significant adverse (Class I and II) impacts. Shore would only have responsibility for cleanup for pipelines under its jurisdiction.

Mitigation Measures for VR-6:

VR-6: Adherence to mitigation measures OS-10b and BIO-9a.

Rationale for Mitigation: By application of OS-10b for proper pipeline design, inspection, maintenance and retrofitting; and BIO-9a for preparation of a containment plan, land use impacts can be minimized. Impacts from small spills that can be contained can be reduced to less than significant.

Residual Impacts: Impacts of land use and recreational resources on land can remain significant (Class I) from a large oil spill.